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July 7, 2004

Via Electronic Mail and Certified Mail
Return Receipt Requested

Mr. Kevin Adler, Remedial Project Coordinator
U.S. Environmental Protection Agency, Region 5
Office of Superfund, Remedial & Enforcement Response Branch
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Subject: Granville Solvents Site Removal Action Quarterly Report – Second Quarter 2004

Dear Mr. Adler:

On behalf of the Granville Solvents Site Response Management Group, LLC, Metcalf & Eddy of Ohio, Inc. respectfully submits the Quarterly Report for the Removal Action at the Granville Solvents Site. Copies have been sent to the following individuals:

Mr. Steve Acree, U.S. EPA (2 copies)
Mr. Peter Felitti, U.S. EPA (cover letter)
Mr. Fred Myers, Ohio EPA (1 copy)
Mr. Joe Hickman, Manager, Village of Granville (1 copy)

If you have questions regarding this submittal, please contact me at (614) 890-5501.

Respectfully,

METCALF & EDDY OF OHIO, INC.

Gerald R. Myers
Program Director

cc B. Pfefferle, Baker & Hostetler – Steering Committee Chairman
W. Brewer, Duke University - Technical Committee Chairman

GRANVILLE SOLVENTS SITE
REMOVAL ACTION QUARTERLY REPORT
FOR APRIL, MAY, and JUNE 2004

JULY 2004

Pursuant to the requirement set forth in the Administrative Order by Consent (AOC, November 7, 1994) between the U.S. EPA and the Granville Solvents Site (GSS) Potentially Responsible Parties (PRP) Group (currently represented as the Granville Solvents Site Response Management Group, LLC), in Section 2.5-Reporting, and the letter, dated February 14, 1996, from Ms. Diane Spencer (U.S. EPA), this report constitutes the quarterly written progress report concerning actions undertaken pursuant to the AOC. This report covers the period of April 1, 2004, through June 30, 2004.

I. PROGRESS MADE DURING REPORTING PERIOD

Source Area Groundwater Control

The groundwater pumping and treatment system operated 720 hours in April, 744 hours in May, and 713 hours in June, for a total of 2,177 hours (99.7% of the total time available) during the second quarter of 2004. Since operation of the treatment system began in December 1994, the system has operated 98.9% of the available time.

The treatment system processed approximately 11.5 million gallons of water in April, 11.9 million gallons of water in May, and 10.7 million gallons of water in June, for a total of 34.2 million gallons of water for the quarter. Since operation began in December 1994, more than one billion gallons of groundwater (1,186,453,000 gallons) have been extracted and treated.

During the second quarter of 2004, M&E collected monthly air pressure measurements in the air-stripping unit's exhaust duct, which was used to calculate airflow values. The measured airflow was 1,927 cubic feet per minute (cfm) in April, 1,711 cfm in May and 1,700 cfm in June.

M&E continued to perform the scheduled monthly maintenance on the treatment system. This maintenance ensures the system is performing at maximum efficiency and decreases unscheduled downtime. The maintenance included replacing the bag filters, lubricating the transfer pump and blower motors, and checking the flow meters and level sensors.

Water samples were collected from the system's influent and effluent sampling ports on April 13, May 11, and June 7. The analytical results are presented in Table 1.

TABLE 1
Monthly Influent/Effluent Sampling Results

VOCs	Influent April 13	Effluent April 13	Influent May 11	Effluent May 11	Influent June 7	Effluent June 7
1,1,1-Trichloroethane	20 µg/l	ND	19 µg/l	0.36J µg/l	21 µg/l	ND
cis-1,2-Dichloroethene	2.2 µg/l	ND	2.1 µg/l	ND	2.5 µg/l	ND
Tetrachloroethene	11 µg/l	ND	10 µg/l	0.35J µg/l	13 µg/l	ND
Trichloroethene	23 µg/l	0.37J µg/l	22 µg/l	0.64 µg/l	24 µg/l	0.28J µg/l
1,1-Dichloroethane	0.50 µg/l	ND	0.44J µg/l	ND	0.55 µg/l	ND

ND – not detected

Approximately 34.2 million gallons of water were processed for the second quarter of 2004. Based on these data, total VOCs of approximately 0.20 lb/day in March, 0.21 lb/day in April and 0.23 lb/day in June, were discharged to the atmosphere during this reporting period.

TCE was detected in the effluent from the groundwater treatment system at concentrations below the discharge limit of 5 ug/l established by Ohio EPA.

Groundwater Monitoring

Groundwater level measurements were collected on June 8. These data were used to develop a potentiometric surface map, which is included as Figure 1 with this report. Annual groundwater sampling was completed on May 10 and 11, 2004. Table 2 contains a summary of the analytical results.

TABLE 2
Annual Groundwater Monitoring Results, µg/l

VOCs	MW-1	MW-2D	MW-4D	GSS-MW5	MW-5	MW-6	MW-8	GSS-MW11	GSS-MW12	GSS-MW14	MW-P1
1,1,1-trichloroethane	140	18	23	0.57	0.7	260	ND	0.8	ND	ND	160
cis-1,2-dichloroethene	ND	6.6	26	ND	ND	ND	56 E	ND	ND	ND	ND
tetrachloroethene	14	74 E	41	ND	ND	ND	ND	ND	ND	ND	53
trichloroethene	40	35 E	73	ND	ND	15	ND	ND	ND	ND	55
1,1-dichloroethane	ND	ND	8.2	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-dichloroethene	ND	0.42 J	0.79 J	ND	ND	ND	5.2	ND	ND	ND	ND
toluene	ND	ND	ND	ND	ND	ND	ND	ND	0.35 J	0.31 J	ND

ND - not detected; J - estimate; E – estimate; concentration exceeded instrument calibration range.

Source Area Soils

Source area soils are undergoing treatment utilizing air injection (AI), air sparging (AS) and soil vapor extraction (SVE). The treatment systems have been in operation since December 2000. The soil vapor extraction system previously operated with a biweekly schedule in which one half of the SVE wells were operated during one period and one half operated during the alternate period. The vacuum extraction system under the cap was operated during all periods. The biweekly alternation was changed on May 2, 2003 such that all vacuum extraction wells are now operated simultaneously. The average flow rate for the SVE system this past quarter was approximately 531 standard cubic feet per minute (scfm).

A SUMMA canister sample of the SVE system influent was collected June 3. The results are provided in Table 3 below.

TABLE 3
Summa Canister Sampling
Detected Parameters

Compound	Concentration (ppmv)	Concentration ($\mu g/m^3$)
Tetrachloroethene	0.200	1356
Trichloroethene	0.280	1504
1,1,1-Trichloroethane	0.520	2839
cis-1,2-Dichloroethene	0.009	35.73
Totals	**1.009**	**5735**

ppmv – parts per million by volume

The total soil gas extracted by the SVE system for the quarter was approximately 65.9 million cubic feet. Approximately 23.6 pounds of VOCs were removed by the SVE this past quarter, and an approximate total of 334 pounds of VOCs have been removed by the SVE system since start-up Mass removal estimates are based on PID readings and SUMMA canister samples obtained periodically from the SVE influent. The removal rate for the SVE system has remained well below the de minimis allowed quantity of 10 pounds per day throughout this quarter.

Active or Completed Tasks

The following specific tasks were completed during the reporting period:

- Collected water samples on April 13, May 11, and June 7, 2004, from the treatment system influent and effluent sampling ports;
- Collected water level measurements on June 8 and generated a potentiometric surface map based on these measurements;
- Collected airflow data on a monthly basis;
- Collected the quarterly suite of samples from the monitoring network on May 10 and 11;
- Continued to operate the AI system on a 3 hour on/3 hour off cycle; and
- Performed routine acid washing of the Shallow Tray™ air stripper.

II. DELIVERABLES (CURRENT PERIOD AND NEXT PERIOD)

CURRENT PERIOD:

Deliverable	Due Date	Delivered
Quarterly Report	July 7, 2004	July 7, 2004

NEXT PERIOD:

Deliverable	Due Date
Quarterly Report	October 7, 2004

III. DIFFICULTIES ENCOUNTERED DURING REMEDIAL ACTIONS TAKEN THIS PERIOD

- Acid metering pump failed during acid washing of air stripper and required replacement.
- Pumping rate from GSS-EW2 briefly fluctuated during April and was readjusted.

IV. ANTICIPATED ACTIVITIES DURING NEXT REPORTING PERIOD

During the next reporting period, M&E will perform the following tasks:

- Collect potentiometric surface data on a quarterly basis;
- Collect a quarterly suite of samples from the groundwater monitoring network in August;
- Sample the treatment system influent and effluent water on a monthly basis;
- Perform scheduled maintenance of the treatment systems;
- Perform scheduled data collection for the treatment systems; and
- Collect a SUMMA canister sample of the SVE effluent.
- Clean pipe from GSS-EW2 to treatment building.

LEGEND

* NOT USED IN CONTOURING

Nonresponsive map showing municipal well locations

SCALE IN FEET

0 100' 200'

Metcalf & Eddy

GRANVILLE SOLVENTS SITE

POTENTIOMETRIC SURFACE JUNE 8, 2004

GRANVILLE, OHIO

FILE NAME	CHECKED	DRAWN	DATE	PROJECT NO.	FIGURE
potjune04.dwg	DMJ	JAW	7/6/04	016688	1

PATH/FILENAME: P:\PROJ\Granville\CAD\potjune04.dwg
LAST UPDATE: July 01, 2004 @ 01:30:38 pm
PLOT DATE: July 06, 2004 @ 03:48:48 pm